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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,085	06/24/2004	Karl Hellwig	P12169-US1	5874

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ERICSSON INC.  
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EXAMINER

KARIKARI, KWASI

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/500,085		HELLWIG ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kwasi Karikari		2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06/24/2004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Remarks, filed on 10/15/2005, with respect to the rejection(s) of claim(s) 1-17 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection are made.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-10 and 12-17 are rejected under U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (Fig. 3, "Description of Prior Art") in view of Satoh et al., (U.S. 4,578,797), (hereinafter Satoh).**

Regarding **claim 1**, the applicant's admitted prior art discloses an apparatus (see Page 1, line 20) for use in a switching network of a telecommunication system [Page 1, line 0002], said apparatus including:

a plurality of transcoding units (Page 6, line 14) for encoding and decoding data, including speech data, wherein at least one transcoding unit of said plurality of transcoding units are for operating in tandem-free operation mode (Page 3, lines 31-34),

switching means (Page 1, line 37) including speech speech data through said plurality of transcoding units;

a transcoder controller (Page 6, line 16) for controlling said switching means and said plurality of transcoding units, wherein said transcoder controller is adapted for

instructing said switching means to insert one of said plurality of transcoding unit into a data path associated with a connection between a mobile terminal of said telecommunication system

determining that a switching controller associated with the switching means is transparently (data received from TRAU will determine whether tandem-free operation is possible, Page 4, line 36-Page 5, line 7) through-connecting the data and wherein said transcoder controller is adapted to instruct said one of said at least one transcoding unit to operate wherein said transcoder controller is adapted to instruct, during said connection (both tandem-free and normal operation operations are implemented, see Page 2, lines 35-Page 3, line 5 and Page 4, lines 26-35); but fails to teach the means for eliminate said one of said at least one transcoding unit from said data path.

Satoh teaches a procedure a connecting device can eliminate the codec at the junction of the transmission path and which can minimize the degradation of transmission quality.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Satoh and the applicant's admitted prior art for the benefit of achieving a system that can eliminate codec from transmission path and at the same time minimize the degradation of transmission quality

Regarding **claim 2**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus according to claim 1, further including:

a plurality of TCME units (Page 5, line 23), for performing TFO-specific circuit wherein said transcoder controller is adapted to instruct said switching means to insert one of said plurality of TCME units into said data path, and wherein said transcoder controller is adapted to instruct, during said connection, said switching means to eliminate said one of said plurality of TCME units from said data path (TCME units to eliminate the 48kbps of decoded data and forward the original 16 kbps coded data, (see Page 5, lines 16-35 and Page 6, lines 25-29).

Regarding **claim 3**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus according to claim 1, wherein said transcoder controller is adapted to determine whether a switching controller (Page 1, lines 25-27) of said switching network intends to add supplementary services during said connection (Page 2, lines 10-22 and Page 6, lines 11-24), and wherein said transcoder controller is adapted to instruct, during said connection, said switching means to eliminate at least one of said

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transcoding unit from said data path, if said switching controller does not intend to add supplementary services (Page 1, lines 25-27 and Page 6, lines 11-24).

Regarding **claim 4**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus according to claim 3, wherein said transcoder controller is adapted to instruct, during said connection, said switching means to insert one of said plurality of transcoding units into said data path, if said switching controller intends to add supplementary services (Page 2, lines 10-22 and Page 6, lines 11-24).

Regarding **claim 5**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 2, wherein said transcoder controller is adapted to determine whether or not a switching controller of said switching network intends to add supplementary services during said connection (Page 2, lines 1-22), and

wherein said transcoder controller is adapted to instruct, during said connection, said switching means to eliminate said one of said at least one transcoding unit as well as said one of said plurality of TCME units from said data path, if said switching controller does not intend to add supplementary services (Page 2, lines 1-9; Page 5, lines 18-31 and Page 6, lines 18-29).

Regarding **claim 6**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 5, wherein said transcoder controller is adapted to instruct, during said connection, said switching means to insert one of said plurality of transcoding units

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as well as one of said plurality of TCME units into said data path, if said switching controller intends to add supplementary services (Pages 4, lines 26-31; Page 5, lines 18-31 and Page 6, lines 18-29).

Regarding **claim 7**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 6, wherein said transcoder controller is adapted to determine, based on an evaluation of locally available information, whether or not a switching controller of said switching network intends to add supplementary services (Page 2, lines 3-17) during said connection (transcoder controller allocates a TRAU to each connection data, see Page 6, lines 11-24).

Regarding **claim 8**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 7, wherein said locally available information includes results of a supervision of inputs and outputs of said apparatus (Page 3, lines 15-30).

Regarding **claim 9**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 7, wherein said locally available information includes results of a supervision of reports from said one of said plurality of transcoding units and said plurality of TCME units (data received from TRAU will determine whether tandem-free operation is possible, Page 4, line 36-Page 5, line 7).

Regarding **claim 10**, the applicant's admitted prior art, as modified by Satoh, discloses the transcoding apparatus claim 7, wherein said locally available information includes

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information received from said switching controller (switch controller adds supplementary services to the speech data, Page 2, lines 10-20).

Regarding **claim 12**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus claim 11, further including at least one protocol/interface conversion unit, for performing protocol conversion operations between different interfaces, wherein said transcoder controller is adapted to instruct, during said connection, said switching means to insert one of said at least one protocol/interface conversion unit into said data path (Tandem Free Operation protocol has been developed for GSM system, (see Page 4, lines 1-12 and Page 5, lines 11-24).

Regarding **claim 13**, the applicant's admitted prior art, as modified by Satoh, discloses the apparatus according to claim 12, further including at least one link supervision function unit for monitoring the TFO protocol wherein said transcoder controller is adapted to instruct, during said connection, said switching means to insert one of said at least one link supervision function unit into said data path (Page 4, line 36- Page 5, line 11).

Regarding **claim 14**, the applicant's admitted prior art, discloses a TCME head apparatus for use in a switching network of a telecommunication system, said TCME head apparatus including:

a plurality of TCME units (Page 5, line 23) for performing TFO-specific circuit multiplication operations;



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switching means (Page 2, line 3-7) adapted to switch data through said plurality of TCME units;

a TCME head controller (Page 6, lines 11-24) for controlling said switching means and said plurality of TCME units wherein said TCME head controller is adapted for

instructing said switching means to insert one of said plurality of TCME units into a data path associated with a connection between a mobile terminal of said telecommunication system and said switching network;

determining that a switching controller associated with the switching means is apparently through-connecting the data (data received from TRAU will determine whether tandem-free operation is possible, Page 4, line 36-Page 5, line 7) wherein said TCME head controller is adapted to instruct, during said connection, said switching means (Page 2, line 35- Page 3, line 5; Page 3, lines 15-30 and Page 4, lines 26-35), but fails to teach means to eliminate said one of said plurality of TCME units from said data path.

Satoh teaches a procedure a connecting device can eliminate the codec at the junction of the transmission path and which can minimize the degradation of transmission quality.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Satoh and the applicant's admitted prior art for the benefit of achieving a system that can eliminate codec from transmission path and at the same time minimize the degradation of transmission quality

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Regarding **claim 15**, the applicant's admitted prior art discloses a TCME head apparatus according to claim 14, wherein said TCME head controller is adapted to determine whether or not a switching controller of said switching network intends to add supplementary services during said connection (Page 1, line 3-9 and Page 5, lines 18-32), and

wherein said TCME head controller is adapted to instruct, during said connection, said switching means to eliminate said one of said plurality of TCME units from said data path, if said switching controller does not intend to add supplementary services (Page 2, lines 10-20 and Page 5, lines 18-32).

Regarding **claim 16**, the applicant's admitted prior art, as modified by Satoh, discloses a TCME head apparatus according to claim 15, wherein said TCME head controller is adapted to instruct, during said connection, said switching means to insert one of said plurality of TCME units into said data path, if said switching controller intends to add supplementary services (Page 1, line 36- Page 2, line 20 and Page 5, lines 18-32).

Regarding **claim 17**, the applicant's admitted prior art, as modified by Satoh, discloses a TCME head apparatus according claim 16, wherein said TCME head controller is adapted to determine, based on an evaluation of locally available information, whether or not a switching controller of said switching network intends to add supplementary services during said connection (TCME head controller allocates a TCME units to eliminate the 48kbps of decoded data and forward the original 16 kbps coded data,

(see Page 6, lines 25-29 and Page 5, lines 18-32).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 11 is rejected under 35 U.S.C 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Satoh and further in view of Yoon U.S (6,842,508).**

Regarding **claim 11**, as applied to claim 10 above, the combination of the applicant's admitted prior art and Satoh fails to teach said information received from said switching controller includes port address information.

Yoon teaches a voice mail system for a private switching system which has a voice and signal processing section that include a vocoder, a control section that exchange call messages and a communication control section (see col. 3, lines 50-64 and Fig. 4, item 30a). Yoon further discloses a dual port RAM 30d that maintains transmission and/or reception, including a port address (see col. 6, lines 13-20).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Yoon with the applicant's admitted prior art and Satoh for the

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benefit of achieving a system that compresses a voice data which can later be transmitted to call-connected opponent.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Aftelak (6,132,242)** teaches a method of reverting to tandem operation between transcoders of a communication system

**Sato et al., (20030032440)** teaches a multipoint communication method and communication control device.


**Mayer (6,556,844)** teach a process for transmitting data in particular GSM data

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-2856. The examiner can normally be reached on M-F (8 am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571- 272 5905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**JOSEPH FEILD**  
**SUPERVISORY PATENT EXAMINER**